

DATA PROCESSOR WITH LOCALISED MEMORY RECLAMATION

Publication number: WO9910811

Publication date: 1999-03-04

Inventor: HOULSDWORTH RICHARD JAMES

Applicant: KONINKL PHILIPS ELECTRONICS NV (NL); PHILIPS SVENSKA AB (SE)

Classification:

- international: G06F12/00; G06F9/44; G06F9/46; G06F12/02; G06F12/00; G06F9/44; G06F9/46; G06F12/02; (IPC1-7): G06F12/02

- european: G06F12/02D2G; G06F12/02D2G2

Application number: WO19981B01087 19980716

Priority number(s): GB19970017715 19970822

Also published as:

EP0938706 (A1)
US6304949 (B1)
EP0938706 (A0)

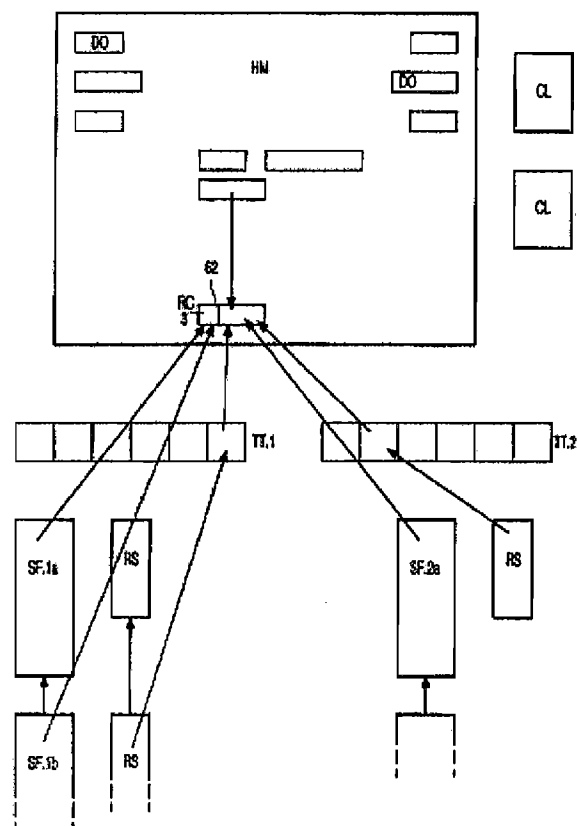
Cited documents:

EP0783150
US5321834
US4853842
US5355483
EP0767432

[Report a data error here](#)

Abstract of WO9910811

A data processing apparatus for handling multi-thread programs comprises a data processor coupled with a random-access memory (HM) containing a plurality of data objects (DO). Each data object is accessed via respective pointers carried by memory stacks (SF) associated with respective threads. Periodically, a garbage collection procedure is applied to the random-access memory with those data objects (DO) having no extant pointers thereto from any source being identified and deleted. Subject to a locking constraint applied to some of the data objects, the remainder are compacted to free space in the memory (HM). To enable localising of the garbage collection procedure, reference stacks (RS) are provided for each thread stack frame (SF) such as to identify, preferably via a per-thread reference table (TT), data objects (DO) referenced from only a single frame, which objects are deleted on conclusion of that frame.



Data supplied from the *esp@cenet* database - Worldwide